

October 1994

# WEAPONS OF MASS DESTRUCTION

## Reducing the Threat From the Former Soviet Union



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United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-257251

October 6, 1994

The Honorable Earl Hutto  
Chairman  
The Honorable John Kasich  
Ranking Minority Member  
Subcommittee on Readiness  
Committee on Armed Services  
House of Representatives

In response to your request, we have reviewed several aspects of the Cooperative Threat Reduction (CTR) program. This is the unclassified version of our previously issued classified report to you. The CTR program was established to reduce the threats posed by weapons of mass destruction in the former Soviet Union (FSU). Specifically, we examined the program's (1) progress in implementing projects and obligating funds, (2) overall planning, (3) potential impact, and (4) use of funds for nonpriority objectives.

## Background

In 1991, Congress authorized the Department of Defense (DOD) to establish a CTR program to help the FSU (1) destroy nuclear, chemical, and other weapons (including strategic nuclear delivery vehicles); (2) transport and store these weapons in connection with their destruction; and (3) prevent their proliferation. Congress subsequently directed DOD to address these objectives on a priority basis and to address several additional objectives, including the conversion of FSU defense industries to civilian uses. Congress has authorized<sup>1</sup> funding for CTR projects in three annual increments. To date, DOD has over \$1 billion in spending authority for the CTR program. About \$800 million of this total was to be reallocated from other DOD activities.

## Results in Brief

The CTR program stands at an important crossroad in its evolution. Over the past 3 years it has evolved from a hastily established 1-year effort into a wide-ranging, multiyear program. However, program officials have not established a process to ensure that annual budget requests are driven by a long-range assessment of tasks that need to be accomplished and have not

<sup>1</sup>Congress authorized funding for the CTR program objectives in title II of Public Law 102-228, title XIV of Public Law 102-484, and title XII of Public Law 103-160. Congress provided for CTR funding in the amount of \$400 million annually in section 108 of Public Law 102-229, section 9110(a) of Public Law 102-396, and title II Public Law 103-139. Other related legislation includes title V of the Freedom of Support Act (P.L. 102-511).

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estimated total requirements for achieving CTR priority objectives. Executive branch officials told us that program officials will continue to ask for \$400 million annually because of a belief that this level has been deemed acceptable by Congress.

CTR officials intend to obligate the bulk of CTR funds—about \$969 million—in support of 36 projects.<sup>2</sup> These projects focus primarily on the program's three priority objectives. As of June 1994, CTR officials had obligated nearly \$223 million—about 23 percent of the funding. The program's spending pace was initially slowed by the time needed to complete agreements between the United States and the former Soviet republics, fully develop projects, and comply with legislated requirements for reallocating funds originally appropriated for non-CTR purposes. Program officials expect obligations to accelerate to almost \$600 million by the end of fiscal year 1995 as more projects enter implementation. DOD plans to allocate \$400 million for CTR projects in fiscal year 1995 and to program \$400 million annually for CTR projects. If approved by Congress, these plans would result in a total CTR budget of over \$3 billion<sup>3</sup> during fiscal years 1996 through 2000.

Although DOD intends to expend a considerable amount of funds for the CTR program, program officials have not yet (1) established a long-term planning process, (2) prepared a multiyear plan and requirements-based funding profile, or (3) implemented an audit and examination process. The need for long-term planning to help prioritize CTR projects is underscored by the disparate prognoses for achieving priority CTR objectives. The program's direct impact over the long term is still unclear and appears to vary widely from one objective to the next. Information obtained during the course of our review indicates that:

- Currently planned CTR aid appears to be crucial to Ukrainian and Kazakhstani efforts to dismantle delivery systems.
- CTR officials appear to have overstated the probable impact of similar CTR projects in Russia. Russia can meet—without CTR aid—its Strategic Arms Reduction Treaty I (START) obligations and eliminate thousands of strategic nuclear delivery vehicles and launchers over the next decade. Russia also

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<sup>2</sup>DOD does not give funds directly to FSU states but instead provides goods and services needed to address CTR goals.

<sup>3</sup>A separate GAO review of all U.S. FSU aid programs indicates that about \$1.3 billion in non-CTR DOD aid was also appropriated. Of this amount, \$979 million was transferred from DOD to the Agency for International Development.

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does not want U.S. involvement in actually destroying its nuclear warheads.

- In some cases, currently planned CTR aid may not be enough to overcome existing challenges. Ongoing CTR projects will not enable Russia to meet Western safety standards in transporting warheads to dismantlement facilities, nor will they provide Russia the means to safely destroy its vast chemical weapons arsenal. Currently planned CTR projects could help reduce but not eliminate certain proliferation risks.

DOD plans to spend nearly \$153 million on nonpriority objectives. DOD officials plan to make defense conversion a higher priority than nonproliferation—a congressionally designated priority—in deciding future CTR funding of projects, despite its uncertain prospects for success.

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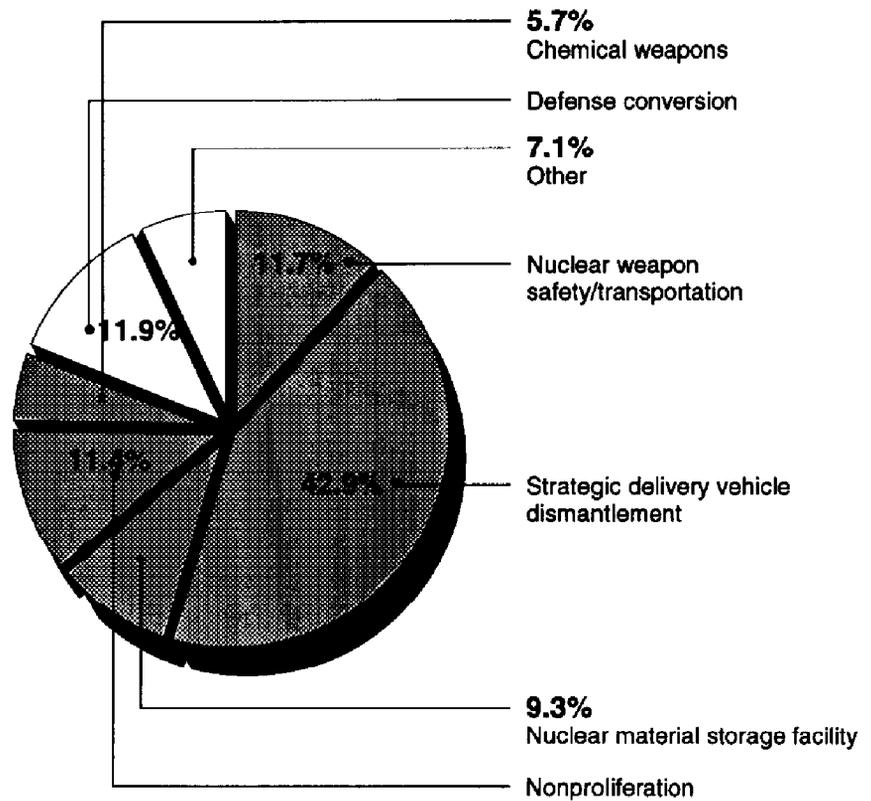
## Program Implementation and Spending Pace

CTR officials have obligated or intend to obligate \$969 million for 36 projects (see app. 1) in support of 37 agreements negotiated with Russia, Ukraine, Kazakhstan, and Belarus.<sup>4</sup> As shown in figure 1, about 81 percent of these funds will be directed toward projects that support priority objectives.

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<sup>4</sup>U.S. allies plan to provide similar aid valued at about \$194 million. The United States and its allies periodically discuss such aid.

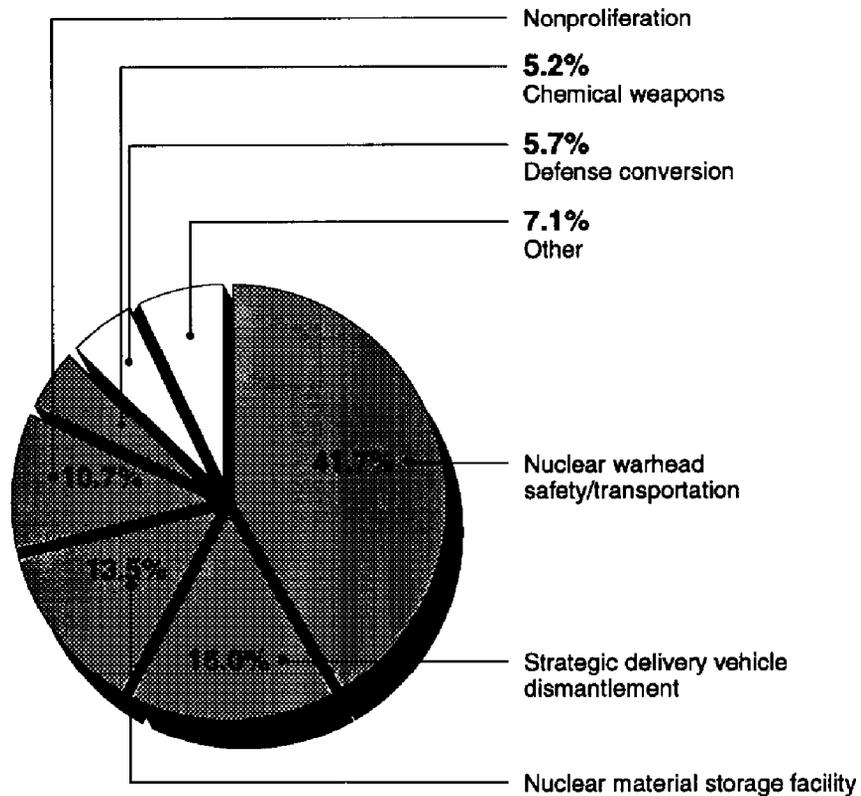
**Figure 1: Distribution of \$969 Million Obligated or to Be Obligated by DOD**



Shaded areas represent priority CTR objectives.

By June 1994, CTR officials had obligated \$223 million of the total \$969 million and had disbursed about \$50 million. As shown in figure 2, about 87 percent of the \$223 million obligated has been directed toward priority objectives. Appendix II provides information on the status of some projects for which funds have been obligated and disbursed.

**Figure 2: Distribution of \$223 Million Already Obligated by DOD**



Shaded areas represent priority CTR objectives.

CTR officials cite several factors in explaining why they have not obligated and expended more funds. These include delays in completing agreements with FSU states and complications due to political sensitivities and disarray on the part of the recipient republics. For example, Ukrainian delays of nearly a year in signing a strategic nuclear delivery vehicle dismantlement agreement with the United States held up the initial \$135 million in aid. The Russian Parliament delayed completion of an agreement to establish a science center for almost 2 years. U.S. efforts to help Russia design a nuclear material storage facility have been slowed by local environmental concerns, changes in Russian plans, and Russian government delays in identifying specific types of equipment for the facility. Difficulties in

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adapting surplus U.S. railcars for carrying nuclear warheads on Russian railways led to a 2-year effort to develop hardware for enhancing Russian railcars.

DOD officials told us that the nature of the program's initial funding authority has also complicated their efforts. For both fiscal years 1992 and 1993, Congress authorized DOD to transfer up to \$400 million from other DOD funds to CTR projects. Program officials, however, lost access to \$212 million of 1992 transfer authority at the end of fiscal year 1993 by failing to transfer it<sup>5</sup> within the allotted 2-year period—due, they informed us, to delays in reaching agreements and changing project requirements. CTR officials told us that they also had difficulties in finding funding sources within DOD to transfer to fiscal year 1993 CTR projects valued at \$310 million.<sup>6</sup> As of March 1994, program officials had only \$278 million available to spend. The program has since received authority to spend \$400 million of appropriated CTR money for fiscal year 1994. It now projects a steep increase in obligations—to almost \$600 million—by the end of fiscal year 1995.

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## Lack of CTR Planning

Congress initially set the CTR program's funding level and provided the program with several broad objectives. A National Security Council-chaired steering group<sup>7</sup> subsequently set priorities to spend appropriated CTR funding based on project proposals developed by several U.S. agencies and FSU experts and officials. DOD officials began requesting CTR funding in their fiscal year 1994 budget submission, but did not identify to Congress what priorities or projects would be funded.

CTR program officials have testified before Congress that the program will run through the year 2000 to achieve its weapons dismantlement and storage objectives. DOD plans to program \$400 million annually for the next 5 years to implement CTR projects.

Although the program has thus evolved into a multiyear effort, program officials have yet to adopt the planning tools needed to guide such a program. These officials have not established a process to ensure that annual budget requests are driven by a long-range assessment of tasks that

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<sup>5</sup>Program officials are seeking restoration of the expired transfer authority.

<sup>6</sup>According to the DOD Comptroller's Office, DOD had previously funded CTR projects from its Defense Business Operations Fund. However, by 1993 such monies were no longer available.

<sup>7</sup>The group includes representatives from the Joint Chiefs of Staff; the Arms Control and Disarmament Agency; the Central Intelligence Agency; and the Departments of Defense, State, and Energy.

need to be accomplished and have not estimated total requirements for achieving CTR priority objectives.

Moreover, DOD officials have not yet begun auditing FSU use of CTR aid. Results of audits and examinations can provide important input to planning efforts. DOD is required to ensure that such aid is being used for intended purposes and has negotiated CTR agreements that give the United States the right to examine how the aid is being used. DOD recently approved an audit and examination plan and CTR officials hope to initiate audit procedures within the next several months.

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## Impact on Priority Objectives

The long-term impact of CTR projects is unclear, but current information suggests it is likely to vary widely by objective and, within priority areas, from project to project. For example, the Russians have specifically stated that they do not want U.S. assistance in dismantling nuclear warheads. However, CTR aid appears likely to facilitate Ukrainian delivery vehicle dismantlement efforts. Currently planned CTR projects should provide needed requirements data and technical support to Russian efforts to destroy chemical weapons but will not actually destroy the chemical weapons. U.S. officials note that CTR projects will only lay the foundation for addressing the FSU proliferation threat.

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## Nuclear Warhead Dismantlement

Russia appears able to dismantle tens of thousands of retired nuclear warheads by the end of the century without U.S. help. The total Russian nuclear stockpile is estimated to be 30,000 warheads. According to Russian officials, they are dismantling the FSU nuclear stockpile at a rate of 2,000 to 3,000 weapons per year. If Russia can continue dismantling warheads at the highest rate, then as many as 24,000 warheads could be eliminated by the year 2001. Furthermore, Russia does not want any help from the United States in actually dismantling these weapons.

Some Russian Ministry of Atomic Energy (MINATOM) officials have asserted that a shortage of storage for nuclear materials from dismantled weapons will eventually impede their dismantlement efforts and are seeking assistance in constructing a new storage facility.<sup>8</sup> Although U.S. agencies have been unable to confirm that a shortage exists, some agencies believe that Russia has adequate storage space. These agencies believe that

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<sup>8</sup>U.S. officials estimate that the facility could cost \$315 million. CTR officials have obligated \$15 million to help design it and plan to obligate \$75 million for operating equipment. Russia has asked for another \$75 million in construction aid. Japan has indicated that it might be willing to assist Russian fissile material storage efforts.

sufficient space could be available at Russian Ministry of Defense (MOD) nuclear storage facilities. In the past, however, MINATOM has argued against the use of MOD facilities. Recent Russian statements suggest that warhead dismantlement could proceed without the new facility.

On the other hand, U.S. proponents of the facility argue that (1) Russia could blame dismantlement delays on the U.S. government if it fails to support the facility and (2) existing storage space, designed for other purposes, may not be well suited to store weapons components.

## Nuclear Warhead Safety and Security

U.S. officials are concerned about the safety and security of FSU nuclear weapons. Although there have been no known incidents, concerns exist that a Russian nuclear warhead could be lost, stolen, or involved in an accident.

The United States has begun providing Russia with railcar safety and security enhancement kits, emergency response equipment, and nuclear material storage containers. Deliveries of armored blankets<sup>9</sup> have been completed. While such aid may lessen transportation risks somewhat, U.S. analysts informed us that it will not make the Russian weapons transportation system safe by Western standards.

To meet their dismantlement requirements, the Russians have requested that 115 railcars be modified. According to a study conducted by U.S. analysts, the number of railcars being modified is sufficient to meet Russian dismantlement needs. However, the railcar modification kits will not remedy all shortcomings. The Russians had asked for no more than 115 kits and deleted fire suppression equipment because such equipment increased the weight of their railcars.

Russia recently indicated concerns over safety issues by asking the United States for (1) railcars to carry guards, emergency response equipment, and hardware for detecting obstructed and defective tracks; (2) 600 "supercontainers" to transport weapons; and (3) 15 containers to transport damaged weapons.<sup>10</sup> The United States has not yet determined whether to fund this request.

<sup>9</sup>Blanket deliveries began not long after Russia had completed removing tactical warheads from other FSU states.

<sup>10</sup>The French and British plan to provide another 350 weapon supercontainers—valued at about \$35 million. The British also plan to provide Russia with special trucks to carry weapons.

## Strategic Delivery Vehicles

The FSU states must still eliminate about 530 START-accountable nuclear delivery systems and destroy their launchers (e.g., silos, submarine tubes, and heavy bombers) to comply with START I limits.<sup>11</sup> Assuming that Kazakhstan and Ukraine eliminate the systems deployed on their territories, and Belarus returns its systems to Russia for redeployment as agreed in the Lisbon Protocol, Russia will be required to eliminate only about 200 delivery vehicles and their launchers.

CTR program officials intend to provide Russia with cranes, welding implements, hydraulic tools, bulldozers, liquid fuel containers, incinerators, plasma cutters, and other items. CTR officials acknowledge that Russia already possesses similar items. CTR officials informed Congress, in early 1994, that they may provide more dismantlement aid from fiscal year 1995 funds to insure that Russia can meet its START I obligations.

However CTR officials' past assertions that Russia cannot meet its START I obligations without CTR aid appear to have been overstated and inaccurately justified the dismantlement assistance. Russia has been dismantling nuclear delivery systems in compliance with arms control treaties for decades without U.S. assistance. According to Russian officials, Russia has already achieved 100 percent of START's 3-year limits and nearly 50 percent of its 7-year limits for delivery vehicles. At this rate, Russia could meet START delivery vehicle limits in 5 years—well within the allowed 7-year period that will begin when START enters into force. In the past 4 years, Russian officials have claimed to have eliminated over 400 launchers.

CTR officials have since conceded that CTR aid is not necessary to ensure Russian START I compliance and instead indicated that Russia will need additional assistance for START II dismantlement efforts. Officials have also asserted that CTR aid will increase the Russian dismantlement rate. The Russians have made general statements indicating that the aid could accelerate their progress by increasing the flexibility and efficiency of their efforts but have not indicated the rate of acceleration.

Ukraine has fewer delivery systems than Russia to dismantle but lacks Russia's capabilities and infrastructure. U.S. aid, thus, appears likely to facilitate Ukrainian dismantlement efforts. U.S. officials plan to obligate over 70 percent of the estimated cost of dismantling Ukrainian systems.

<sup>11</sup>START I limits the FSU to 1,600 delivery vehicles and 6,000 warheads no later than 7 years after entry into force of START I. START II further lowers these limits and bans multiple re-entry vehicle intercontinental ballistic missiles.

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The United States will help provide equipment (including fuel, cranes, cutters, computers, and incinerators) and a SS-19 liquid propellant neutralization facility,<sup>12</sup> as well as assist in deactivating SS-24 missiles.<sup>13</sup>

CTR program officials plan to provide Kazakhstan with needed technical assistance in destroying SS-18 missile silos once Russia has removed the warheads and missiles. The United States and Kazakhstan have yet to define program requirements or obligate significant funds for dismantling delivery vehicles. CTR officials also plan to provide assistance to the government of Belarus to clean-up former strategic rocket forces bases and use them for civilian purposes. Under CTR, the United States will provide training, but the Belarusians will complete the work themselves.

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## Chemical Weapons

Russia lacks needed technical capabilities for safely destroying its chemical weapons. As such, it may not be able to comply with the time frames of the international Chemical Weapons Convention for safely destroying its declared 40,000-metric ton chemical weapons stockpile.<sup>14</sup> U.S. officials have concluded that Russia is likely to place a low priority on paying the high cost of doing so.

To date, CTR officials plan to obligate \$55 million to assist Russia with its chemical weapons destruction. Officials are now providing Russia with a technical support office and technical services. Officials are in the process of providing a chemical weapons analytical laboratory and have awarded a contract for a detailed operations plan for destroying the Russian chemical weapons stockpile. These projects should provide needed requirements data and technical support but will not destroy Russian chemical weapons.<sup>15</sup>

CTR program officials have indicated that the program may help fund construction of a chemical weapons destruction facility from its fiscal year 1995 budget. One DOD official has stated that the United States may spend \$300 million to help build a pilot destruction facility.

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<sup>12</sup>Other allied nations have held discussions with Ukraine on the disposal of liquid fuel from strategic weapons.

<sup>13</sup>"Deactivation" is a non-START I/II term used to describe the status of Ukrainian SS-24 missiles that have had their warheads removed. Ukrainian officials have stated that SS-24 warheads are being returned to Russia as part of the agreement with Russia and the United States. The United States is uncertain what Ukraine plans to do with its SS-24 missiles once the launchers are eliminated as Ukraine is not legally bound to destroy the missiles under START.

<sup>14</sup>Arms Control: Status of U.S.-Russian Agreements and the Chemical Weapons Convention (GAO/NSIAD-94-136, Mar. 15, 1994).

<sup>15</sup>Germany has committed funding to explore destroying Russian chemical weapons.

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## Nonproliferation

U.S. officials are concerned that FSU weapons of mass destruction and related technologies may spread to other countries and that continued FSU economic deterioration could exacerbate this threat. CTR officials plan to help employ FSU weapons experts, improve controls and accountability over nonmilitary and military nuclear material, and strengthen national export control systems.<sup>16</sup> The CTR program has not assessed the total requirements for addressing the FSU proliferation threat, and U.S. officials note that these CTR projects will only lay the foundation for future efforts by the FSU states themselves.

According to Russian estimates, there are several hundred FSU experts capable of designing a nuclear weapon and 10,000 individuals with related weapons skills. To help them find peaceful work in the FSU, U.S. and allied officials have established a multilaterally funded science and technology center in Moscow and plan to establish a similar center in Kiev. The Moscow science center's currently approved projects will sponsor more than 3,000 scientists for about 3 years.

CTR officials plan to help develop or improve national controls and accountability over nonmilitary and military nuclear materials in Russia, as well as nonmilitary nuclear materials in Ukraine and Kazakhstan.<sup>17</sup> Such systems are prerequisites for international safeguards. U.S. officials informed us that the FSU system lags 20 years behind that of the United States. While the Russians have had a facility-based material control and accounting (MC&A) system for all facilities on their territory, they never instituted a consolidated nationwide nuclear MC&A system for reconciling facility level records and transported shipments.

The Department of Energy has prepared a program plan for strengthening Russia's nuclear MC&A system by creating a national level information system and improving MC&A and physical protection at the facility level by installing systems for two or three facilities. The Energy Department is developing similar plans for Ukraine and Kazakhstan. The United States has not determined the total requirements or costs for establishing complete systems.

CTR officials have provided training and equipment for developing a Western-style national export control system in Belarus. Officials are

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<sup>16</sup>Canada, the European Union, France, Germany, Italy, Japan, Norway, and the United Kingdom intend to provide assistance for various nonproliferation projects, including export controls, and science centers in Russia and Ukraine.

<sup>17</sup>Belarus has recently requested similar aid.

assessing what would be needed to develop such systems in Ukraine and Kazakhstan and have conducted export control seminars in the two countries. The United States and Russia are negotiating export control assistance to include training and seminars but not equipment.

U.S. officials have cited nonproliferation objectives in justifying U.S. support for the proposed Russian nuclear material storage facility. The facility should help Russia prevent unauthorized access to its weapons material, although the Russians are not obligated to store all the materials from disassembled nuclear weapons in the storage facility. However, until additional agreements are signed, the extent to which the facility will do so is unclear. The facility could also help support the U.S. long-range efforts to encourage nations to place such materials under international safeguards.<sup>18</sup>

To help ensure that the facility accomplishes desired nonproliferation objectives, the United States has attempted to negotiate specific transparency measures that would help ensure that stored materials are derived from dismantled weapons, safe from unauthorized use, and not used in new weapons.<sup>19</sup> However, Russian officials insist the U.S.-proposed transparency measures be part of a reciprocal and comprehensive arrangement with the United States. To date, the two nations have not reached such an agreement. According to DOD, Russia needs to agree to various transparency measures for the storage facility and adhere to agreed upon audit and examination procedures before the project can move forward.

## Funding Nonpriority Objectives

The CTR program has developed several projects aimed at addressing nonpriority objectives. Of these, defense conversion is to receive the highest share of CTR funding—nearly \$123 million. CTR officials currently plan to help the FSU spin-off privatized civilian firms<sup>20</sup> from enterprises that were producing weapons of mass destruction. The new firms would then

<sup>18</sup>The United States plans to place surplus weapons materials under international inspections to encourage other countries to do the same. U.S. officials consider the Russian facility to be a model in response to the global dilemma of safely disposing of nuclear weapon materials. Russian officials have stated that the facility could be placed under international safeguards as part of the global disposition effort.

<sup>19</sup>Russia has agreed to allow the United States limited inspections of the facility to ensure proper use of CTR aid.

<sup>20</sup>CTR officials also plan to set up enterprises to provide housing and training for demobilized Strategic Rocket Forces officers in the FSU states. U.S. analysts estimate that between 20,000 and 25,000 such officers may be demobilized.

serve as role models for others. Program officials plan to award contracts to U.S. firms to help create civilian companies from four Russian defense enterprises.<sup>21</sup> DOD has also established a nonprofit corporation to administer a demilitarization enterprise fund to invest CTR assistance.

Prospects for success in defense conversion are unclear at best. For example, many Russian officials remain interested in preserving a sizable defense industry—in part to earn hard currency by exporting arms—and three of the four Russian enterprises designated for CTR conversion are not slated to be privatized but will remain state owned. These parent companies would still produce some defense equipment, and the extent to which the new business ventures will be clearly separated from their parent companies remains to be resolved, raising the possibility that U.S. aid could benefit the parent defense companies if safeguards are not put in place.

DOD officials acknowledge that the untested CTR approach may not succeed in producing profitable projects or lead to fully privatized firms. If so, they said, the United States can terminate remaining projects.

Although the CTR program has yet to assess the total requirements of converting Russian industries or the total cost for FSU defense industry conversion,<sup>22</sup> CTR officials have stated that defense conversion projects could receive another \$60 million in fiscal year 1995 funds and could eventually cost as much as \$250 million.

## Recommendation

We recommend that the Secretary of Defense institute a proactive, long-term CTR planning process to help DOD properly allocate the billions of dollars it hopes to spend over the next several years among many competing—and shifting—demands. Such a planning process should incorporate estimates of total requirements for achieving CTR objectives, prioritization of competing objectives, evaluations of projects, and assessments of what U.S. aid could reasonably achieve in overcoming obstacles confronting CTR objectives. Under this planning process, DOD officials should periodically revise and update the plan and use it in producing annual budget submissions that are keyed to achieving priority CTR goals.

<sup>21</sup>Program officials awarded contracts to U.S. firms to help develop civilian firms from three Belarusian defense firms.

<sup>22</sup>According to one Russian estimate, defense industry conversion in Russia could cost \$150 billion.

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## Matters for Congressional Consideration

Given the uncertainties concerning defense conversion in Russia, Congress may wish to consider withholding large-scale funding for future Russian defense conversion projects until the initial results of currently funded projects have been assessed. Because the executive branch has not clearly articulated U.S. objectives with regard to the storage facility, Congress may also wish to consider requiring the executive branch to provide a detailed explanation of how the nuclear material storage facility will (1) serve U.S. nonproliferation interests and (2) directly affect Russian warhead dismantlement.

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## Agency Comments and Our Evaluation

We asked DOD, the State Department, the Department of Energy, and the Arms Control and Disarmament Agency (ACDA) to comment on a draft of this report. Energy declined to comment, but DOD, State, and ACDA generally agreed with the factual elements of the report. DOD also said that it intended to implement our recommendation that the Secretary of Defense establish a proactive, long-term planning process for the CTR program. DOD will establish two new offices to address CTR planning—a policy planning office in the Office of the Assistant Secretary of Defense for International Security Policy and a program office in the Office of the Under Secretary of Defense for Acquisition and Technology. However, DOD did not indicate when such offices would be established, how they would prepare a long-range strategic plan for the CTR program, or how these separate offices would coordinate their planning efforts.

DOD and the State Department did not concur with our suggested matters for congressional consideration. DOD and the State Department commented that providing additional information on the nuclear material storage facility is unwarranted. However, this report demonstrates that, to date, the rationale for supporting this expensive facility is still not clear. DOD further stated that it is premature to make judgments about the effectiveness of defense conversion and reduce its funding. Given the uncertainties associated with defense conversion in the FSU, we believe that the outcome of initial projects should be evaluated before the program commits additional funding. DOD's and the State Department's comments are presented in their entirety in appendixes III and IV, respectively, along with our evaluation.

ACDA agreed with our report message but suggested that we address our recommendation to the National Security Council not the Secretary of Defense because an interagency steering group chaired by the National Security Council should plan the priorities for the CTR program. We made

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this recommendation to the Secretary of Defense because DOD has the spending authority to fund the CTR program. ACDA's comments and our evaluation are presented in their entirety in appendix V.

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## Scope and Methodology

We reviewed CTR documents and met with officials from DOD and the Departments of Energy and State in Washington, D.C., as well as with officials from ACDA and the Central Intelligence Agency. The specific data on funding obligations and disbursements represents a compilation of figures provided by various DOD sources, including the Office of the Special Coordinator for Cooperative Threat Reduction, the Defense Nuclear Agency, and the U.S. Army Corps of Engineers.

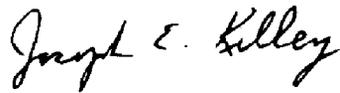
We conducted our review between October 1993 and July 1994 in accordance with generally accepted government auditing standards.

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Unless you publicly announce its contents, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to other interested congressional committees; the Secretaries of Defense, Energy, and State; the Director of the Arms Control and Disarmament Agency; and the Director of the Central Intelligence Agency. Copies will also be made available to others upon request.

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Please contact me on (202) 512-4128 if you or your staff have any questions concerning the report. Major contributors to this report are listed in appendix VI.



Joseph E. Kelley  
Director-in-Charge  
International Affairs Issues



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**Abbreviations**

ACDA	Arms Control and Disarmament Agency
CTR	Cooperative Threat Reduction
DOD	Department of Defense
FSU	former Soviet Union
MC&A	material control and accounting
MINATOM	Russian Ministry of Atomic Energy
MOD	Ministry of Defense
START	Strategic Arms Reduction Treaty

# Funding for Cooperative Threat Reduction Projects

Dollars in millions

Projects by country	Planned obligations	Obligations as of 6/13/94	Disbursements as of 6/21/94
<b>Belarus</b>			
Communications link	\$2.30	\$0.30	\$0.27
Defense conversion	20.00	7.27	0
Emergency response	5.00	3.98	1.50
Export controls	16.30	0.48	0.17
Site restoration	25.00	2.87	0
Propellant elimination	6.00	0	0
<b>Subtotal</b>	<b>74.60</b>	<b>14.90</b>	<b>1.94</b>
<b>Kazakhstan</b>			
Communications link	2.30	0.06	0
Defense conversion	15.00	0	0
Emergency response	5.00	2.00	0
Export controls	2.30	0.04	0
Material control and accountability	5.00	0.02	0
Silo elimination	70.00	0.12	0
<b>Subtotal</b>	<b>99.60</b>	<b>2.24</b>	<b>0</b>
<b>Russia</b>			
Arctic nuclear waste assessment	20.00	10.00	2.79
Armored blankets	5.00	3.24	2.91
Chemical weapons destruction	25.00	11.58	1.63
Chemical weapons lab	30.00	0	0
Defense conversion	40.00	0.15	0
Emergency response	15.00	11.77	9.06
Export controls	2.30	0	0
Fissile material containers	50.00	48.18	3.03
International science and technology center	25.00	23.02	0.47
Material control and accountability	30.00	0.25	0.15
Railcar security upgrade	21.50	21.50	13.97
Storage facility design	15.00	15.00	11.42
Storage facility equipment	75.00	15.01	0
Strategic offensive arms elimination	130.00	28.06	0.06
<b>Subtotal</b>	<b>483.80</b>	<b>187.76</b>	<b>45.49</b>
<b>Ukraine</b>			
Communications link	2.40	0.04	0
Defense conversion	40.00	5.38	0
Emergency response	5.00	2.00	0

(continued)

**Appendix I  
Funding for Cooperative Threat Reduction  
Projects**

Dollars in millions

<b>Projects by country</b>	<b>Planned obligations</b>	<b>Obligations as of 6/13/94</b>	<b>Disbursements as of 6/21/94</b>
Export controls	7.30	0.09	0
Material control and accountability	12.50	0.03	0
Nuclear reactor safety	11.00	0	0
Science\technology center	10.00	0	0
Strategic nuclear arms elimination	185.00	4.67	0.03
<b>Subtotal</b>	<b>273.20</b>	<b>12.21</b>	<b>0.03</b>
<b>Other projects</b>			
Defense/military contacts	15.00	1.01	0.09
Defense Demilitarization Enterprise Fund	7.67	0	0
Other assessment costs	15.00	4.84	1.99
<b>Subtotal</b>	<b>37.67</b>	<b>5.85</b>	<b>2.08</b>
<b>Total</b>	<b>\$968.87</b>	<b>\$222.96</b>	<b>\$49.54</b>

Note: Numbers may not add due to rounding.

# Cooperative Threat Reduction Project Status

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This appendix provides information on the status of some projects for which funds have been obligated. The Department of Defense (DOD) was unable to provide updated information for all of these projects.

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## Belarus

Communications link: Interim equipment was installed and made operational in August 1993. Permanent equipment is expected to be provided by March 1995.

Defense conversion: The program has selected three defense-related enterprises as conversion candidates and issued a draft request for proposals on how these candidates could be converted. The program also issued a request for proposals to U.S. industry regarding housing for demobilized Strategic Rocket Forces officers.

Emergency response: DOD delivered 400 protective suits, 147 pairs of protective boots, 4 radiation detectors, 10 air samplers, 100 dosimeters, and 34 computers. The project is planned to be completed in June 1995.

Export controls: DOD delivered equipment in late 1993 as part of a Commerce Department administrative automation project activity. The project also supported assessment visits, bilateral meetings, and technical exchanges, including a training session for Belarusian export licensing and enforcement officials.

Site restoration (Project Peace): Project requirements are being discussed. Equipment lists and needed training are being finalized for the selected site of Postavy, a former SS-25 missile base.

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## Kazakhstan

Silo elimination: Requirements and equipment lists are being determined.

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## Russia

Arctic nuclear waste: Several workshops have been held. DOD sponsored several expeditions during the summer of 1993, and some assessments of nuclide levels in the Arctic and North Pacific were conducted.

Armored blankets: This project is completed. In July 1992, 250 sets of surplus U.S. Army armored blankets were delivered. By June 15, 1993, 250 sets of Cooperative Threat Reduction (CTR)-contracted armored panels and 24 gallons of seam sealer had been delivered.

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**Appendix II  
Cooperative Threat Reduction Project  
Status**

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**Chemical weapons destruction:** In June 1993, the Army Chemical Material Destruction Agency opened a chemical weapons support office in Moscow. The United States and Russia signed a joint work plan in January 1994. On January 31, 1994, DOD issued a request for proposals to U.S. industry for a concept of operations plan for destroying Russian chemical weapons. The contract was awarded to Bechtel National, Inc.

**Defense conversion:** DOD issued draft request for proposals to U.S. industry concerning conversion of four Russian defense enterprises and housing for demobilized Russian Strategic Rocket Forces officers.

**Emergency response:** According to CTR officials, 800 protective suits, 105 radiation detectors, fiberscopes, communications equipment; 3 packaging trucks; a portable integrated video system; 10 "Jaws of Life" sets; 56 computers; 235 radios; and training have been provided.

**Fissile material containers:** Ten prototype containers were delivered to Russia in April 1993. Sixteen containers are to be delivered for testing, followed by 500 production containers. About 10,000 containers should be delivered by December 1995. The remaining 23,000 on contract will be delivered by the end of 1997.

**International Science and Technology Center:** The center began operations on March 3, 1994. The second Governing Board meeting was held in Moscow on June 17 and 18, 1994, at which a broad range of proposals were considered. Thirty-one new project proposals, worth about \$18 million, were approved that could help develop technologies related to international efforts in verification of nuclear test ban treaties, destruction of weapons of mass destruction, and environmental monitoring. To date, about \$30 million has been committed to a total of 54 projects. These projects will sponsor more than 3,000 scientists for a period of about 3 years.

**Material control and accountability:** The Department of Energy completed a program plan to strengthen the Russian national system of material control and accounting and physical protection. Activities conducted included a U.S.-Russia technical exchange, Russian visits to U.S. facilities, U.S. visits to Russian facilities, a technical working group meeting, and a U.S.-Russia seminar on material control and accounting and physical protection.

**Railcar security upgrade:** The United States developed kits for enhancing the security of railcars used to transport nuclear weapons. As of February 15, 1994, 10 conversion kits had been shipped to Russia. Delivery of another 105 kits is scheduled to be completed by October 1994.

**Storage facility design:** According to the U.S. Army Corp of Engineers, the U.S. component for the facility design was completed in December 1993. The Corp delivered, installed, and provided training for 13 computer work stations in 1993. Additional computer supplies, three lap top computers, software, and a printer were also shipped to Russia.

**Strategic offensive arms elimination:** DOD procured some equipment (such as oxyacetylene torches, welding, and cutting tools) and planned to begin deliveries to Russia by July 1994.

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## Ukraine

**Communications link:** At the time this report was written, the United States had offered to meet for initial technical exchanges to identify requirements, but Ukraine had not accepted the offer. In the interim, the United States had conducted a cost-benefit analysis of possible equipment to be provided.

**Defense conversion:** In March 1994, the United States and Ukraine signed an agreement for up to \$40 million in defense conversion projects. Two contracts worth \$15 million have been awarded. One of these contracts will employ about 300 workers this year and will manufacture about 300 homes. Later this year, two other contracts should be awarded, one for converting a defense industry into a housing industry and the other to convert portions of defense industries into commercial ventures.

**Emergency response:** The United States has proposed dates for initial technical exchanges required to identify requirements. Ukraine has not responded to the meeting dates. Until requirements are determined, no procurement actions can occur.

**Export controls:** This project will provide assistance in the building of export control institutions and infrastructure. Basic requirements were received in May 1994 and a Ukraine delegation visited the United States to refine requirements for automation equipment. A technical exchange is being scheduled for this year.

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**Material control and accountability:** Technical exchanges took place earlier this year and the first site visit to identify specific hardware requirements was scheduled. Once requirements are defined request for proposals will be issued. Initial deliveries of small equipment are anticipated in January 1995.

**Strategic nuclear arms elimination:** At the emergency request of Ukraine, DOD delivered dismantlement materials, including cranes, all-terrain vehicles, communications equipment, truck batteries, power saws, and other tools. This equipment, in addition to gasoline and diesel fuel provided under the CTR program, were used by Ukraine to help return nuclear warheads to Russia. In addition, contracts have been awarded for additional equipment such as cranes, bulldozers, and graders. The contract for the design of the missile neutralization facility has also been awarded to a Ukrainian company.

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## **Other Projects**

**Defense and military contacts:** For Russia, a bilateral working group met in November 1993 to develop the 1994 program agenda. A memorandum of understanding has been signed with Belarus. U.S. and Ukrainian officials have scheduled 27 events for the rest of this year and into 1995. To date, 10 events, worth about \$268,000, have been funded.

# Comments From the Department of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



INTERNATIONAL  
SECURITY POLICY

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, DC 20301-2600



Mr. Joseph E. Kelley  
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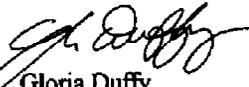
This is the unclassified Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, on "WEAPONS OF MASS DESTRUCTION: U.S. Efforts to Reduce the Threat From the Former Soviet Union," dated May 9, 1994 (GAO Code 711053), OSD Case 9665-X. The DOD partially concurs with the report.

While much of the information reported by the GAO is correct, some of the GAO analysis and conclusions are incorrect, in particular those relating to strategic offensive arms dismantlement assistance to Russia and defense conversion assistance. The DoD concurs with the GAO recommendations that the Secretary of Defense establish a proactive, long-term planning process for the Cooperative Threat Reduction program.

However, the DoD does not concur with the three suggestions for congressional consideration. The Department opposes the suggestions that Congress delay approval for funding additional strategic offensive arms dismantlement assistance to Russia and additional defense conversion assistance to Russia. The DOD also opposes the suggestion that the Executive Branch provide another detailed explanation of how the fissile material storage facility would serve U.S. nonproliferation interests.

**Appendix III  
Comments From the Department of Defense**

The detailed DoD comments on each finding, recommendation, and suggestions are provided in the enclosure. The department appreciates the opportunity to comment on the draft report.



25 AUG 1994

Gloria Duffy  
Deputy Assistant Secretary of Defense and  
Special Coordinator for Cooperative Threat Reduction

Attachments  
a/s

GAO DRAFT REPORT - DATED MAY 9, 1994  
(GAO CODE 711053) OSD CASE 9665-X.

"WEAPONS OF MASS DESTRUCTION: U.S. EFFORTS TO  
REDUCE THE THREAT FROM THE FORMER SOVIET UNION"

DEPARTMENT OF DEFENSE COMMENTS

\*\*\*\*\*

FINDINGS

**Finding A: Cooperative Threat Reduction Program Implementation and Spending Pace.** The GAO observed that, since late 1991, Cooperative Threat Reduction officials had negotiated 37 agreements with Russia, the Ukraine, Kazakhstan, and Belarus for the (1) destruction of nuclear, chemical, and other weapons (including strategic delivery vehicles) and (2) transportation and storage of those weapons in connection with their destruction and to prevent their proliferation. The GAO noted that Cooperative Threat Reduction officials intended to obligate up to \$961 million of the \$1.2 billion authorized for 35 projects in those four countries. The GAO found that, as of April 12, 1994, program officials had obligated about \$117 million and disbursed about \$44 million.

The GAO noted that, according to program officials, several factors had affected the pace of program implementation to date, as follows:

Delays in completing agreements with former Soviet Union states and complications in executing projects.

U.S. efforts to help Russia design a nuclear material storage facility have been slowed by local environmental concerns, changes in Russian plans, and Russian government delays in requesting specific types of equipment.

Now pp. 3-6.

Difficulties in adapting surplus U.S. railcars for carrying nuclear warheads on Russian railways led to a 2-year effort to, instead, develop kits for enhancing Russian railcars. Initial funding authority complicated efforts because (1) program officials lost access to \$212 million of 1992 transfer authority at the end of FY 1993 by failing to transfer and obligate the funding within the allotted 2-year periods and (2) of difficulties in finding funding sources within DOD to support FY 1993 Cooperative Threat Reduction projects valued at \$310 million. (pp. 5-8/GAO Draft Report)

**DoD Response:** Concur. The GAO has accurately described the current status of the program and the factors that have affected the pace of program implementation. However, for the record DoD has obligated \$222.28 million and disbursed about \$44 million, as of May 31, 1994.

**Finding B: Lack of Cooperative Threat Reduction Planning.**

The GAO observed that program officials had taken steps towards a more proactive approach to planning--which included identifying priorities and potential projects for FY 1995 funding request. Nevertheless, the GAO concluded that the program (1) had not adopted the planning tools needed to guide a complex, multiyear program, (2) had not established a process to ensure that annual budget requests are driven by a long-range assessment of tasks that need to be accomplished, and (3) had not estimated total requirements for achieving Cooperative Threat Reduction priority objectives. In addition, the GAO found that program officials had not done the following:

finalized an audit and examination system; and

audited former Soviet Union use of Cooperative Threat Reduction aid.

The GAO asserted the DoD is required to ensure that such aid is being used for intended purposes and had negotiated Cooperative Threat Reduction agreements giving the U.S. the right to examine how the aid was being used. The GAO noted that the Executive Branch was now reviewing several proposals for implementing those rights. The GAO further noted that program officials hope to initiate audit procedures by the end of 1994 and to begin tracking funds to the Moscow science center by mid-1994. Nonetheless, the GAO asserted that there will be limits to U.S. abilities to determine how aid is being used. (pp 8-9/GAO Draft Report)

Now on p. 7.

**DoD Response:** Concur. The GAO has accurately reported that DoD officials have taken steps towards a more proactive approach to planning but that the program needs to adopt a process by which future budget requests are guided by a long-range assessment of tasks. The GAO also accurately noted that DoD has not conducted any audits and examinations of Nunn-Lugar assistance.

The DoD will establish two new offices that will address the concerns noted in the GAO report. In the Office of the Assistant Secretary of Defense/ International Security Policy (ISP), the DoD will establish a policy planning office. Working in conjunction with other DoD offices, that office will assess the long-term needs of the recipient states, estimate the total requirements for each Cooperative Threat Reduction (CTR) program, and prioritize competing objectives. That office will also evaluate completed projects. The work of this office will be used to ensure that future budget requests are driven by a long-range assessment of needs. In addition, that office will be responsible for monitoring other U.S. assistance programs to the Former Soviet Union (FSU), including those run by the Agency for International Development (AID) and the Department of State, as well as those run by non-governmental organizations, to ensure that there is no duplication of effort and to better focus and coordinate our assistance.

In the Office of the Under Secretary of Defense (Acquisition & Technology), Dr. Smith, the Assistant to the Secretary of Defense for Atomic Energy will establish a Program Office that will develop acquisition and procurement plans for each project.

The Secretary has approved an audit and examination plan. The DoD anticipates conducting the first audit and examination of Nunn-Lugar assistance in the summer of 1994, in accordance with the terms of applied agreements with the recipient states.

**FINDING C: Impact of Cooperative Threat Reduction on Nuclear Warheads.** The GAO reported that Russia appeared able to dismantle thousands of retired nuclear warheads by the end of the century without U.S. help. The GAO concluded that, if the estimate is correct, Russia could dismantle most of its retired weapons by the year 2001. The GAO noted that Russia does not want any help from the U.S. in actually dismantling the weapons.

**Storage--**The GAO reported Russian officials asserted that a shortage of storage for nuclear materials from dismantled weapons would eventually impede their dismantlement efforts and that they were seeking a new storage facility. The GAO pointed out that, although recent DoD testimony has echoed the same assertion, other U.S. agencies had been unable to confirm that a storage facility shortage actually existed. The GAO pointed out, however, that on the other hand, U.S. proponents of the facility argue that (1) Russia could blame dismantlement delays on the U.S. Government if it fails to support the facility, and (2) existing storage space may not be well suited to storing weapons components. The GAO pointed out that some officials have justified the facility on nonproliferation grounds.

**Safety and Security--**The GAO reported that U.S. officials are concerned about the safety and security of former Soviet Union nuclear weapons enroute to dismantlement. The GAO noted that, although there have been no known accidents, U.S. officials are nonetheless concerned that a Russian nuclear warhead could be lost, stolen, or involved in an accident.

The GAO noted that the U.S. had begun providing Russia with rail car safety and security enhancement kits, emergency response equipment, and nuclear material storage containers, and deliveries of armored blankets have been completed. The GAO noted that, although Russia asked for no more than 115 kits and deleted fire suppression equipment to lighten cars, it recently indicated its safety concern by asking for (1) railcars to carry guards, emergency response equipment, and hardware for detecting obstructed and defective tracks, (2) 600 "super containers" to transport weapons, and (3) 15 containers to transport damaged weapons. The GAO observed that the U.S. has not yet determined whether to fund this request. (pp. 10-12/GAO Draft Report)

**DoD Response:** Concur. The GAO pointed out that Russia does not want nor does it need U.S. assistance with warhead dismantlement. The GAO also correctly noted some of the reasons behind the DoD provision of assistance for the fissile material storage facility and railcar modification kits for the railcars that transport the nuclear warheads.

The DoD support for providing assistance to Russia for the design and construction equipment of a fissile material storage facility was based on a

Now on p. 8.

formal request from the Russian Government that they needed a modern secure storage facility for the fissile material from dismantled nuclear weapons. It was also based on a concern that, with the breakup of the former Soviet Union and deteriorating economic conditions, the chances of fissile material being stolen or sold to proliferant countries increased.

The DoD assistance for the design and construction equipment for the fissile material storage facility will help ensure that the Russians have a modern secure facility with a material control, accounting and physical protection system that meets international standards. That will help alleviate a potential bottleneck in the Russian dismantlement program and will enhance the DoD overall non-proliferation effort by helping to secure this dangerous material.

The DoD has two assistance agreements with Russia for the fissile material storage facility. First, the DoD agreed to provide up to \$15 million in Nunn-Lugar assistance for the Russian led design effort. The project has been hampered by problems with the Russians not paying their designers to meet the Russian commitment to this effort. The second agreement is for up to \$75 million in construction and operating equipment for the storage facility. Provision of assistance is contingent on three Russian actions. First, Russia had to notify the U.S. of the location of the facility. After much delay, the Russians informed us that they proposed to construct the storage facility at Mayak. The DoD did not choose the Mayak site, and will need to have our experts visit the proposed location before proceeding with any additional assistance for that effort. Russia owes the U.S. a response to our request to visit the site. Second, the Russians need to inform the U.S. that they have received the necessary permits from local authorities and have begun groundbreaking. The DoD will not provide the \$75 million in equipment assistance until it receives those notifications. Finally, Russia needs to agree to various transparency measures for the storage facility, in addition to and without prejudice to, agreed upon audit and examination provisions, before moving forward with that project.

Russia has requested additional assistance with the construction of a fissile material storage facility. The DoD is considering that request and the decision on additional support for that project will be made on the basis of progress in the earlier agreements. Additional DoD support for the project will be contingent on the Russian Government putting sufficient resources

See p. 12.

toward completion of the project. Currently, Minatom does not have a budget for this very costly facility. If the DoD does not see improvements in the cooperation received from the Russians with the implementation of our existing agreements, and if Russia does not budget for construction of the storage facility, the DoD is prepared to discontinue support for the project.

The initial efforts of the CTR program were focused on assisting Russia to enhance the safe, secure transport and storage of nuclear warheads to dismantlement facilities. Toward that goal, the DoD agreed to provide Russia with armored blankets, fissile material containers, emergency response equipment, and modification kits for railcars that transport the nuclear warheads.

The provision of assistance is a bilateral cooperative effort. The DoD cannot force a recipient state to accept assistance. As the GAO report correctly noted, the Russians requested no more than 115 modification kits and deleted fire suppression equipment. While those kits will not enhance every nuclear warhead transport railcar in Russia's inventory, and will not make the Russian weapons transportation system safe by Western standards, that was not the intent. The DoD fully met all the Russian requirements and requests, and the U.S. analysis of the original Russian request concluded that the 115 modification kits was the right amount. The DoD believes Nunn-Lugar assistance in the above-mentioned areas will greatly improve the safety of weapons transport. The assistance cannot solve all of the problems in the former Soviet Union, but can help to improve shortcomings. The GAO report refers to additional Russian requests for assistance in this area, and those are under active consideration for potential funding in FY 1995 should the DoD receive appropriations.

**FINDING D: Impact of Cooperative Threat Reduction Strategic Delivery Vehicles.** The GAO reported that the former Soviet Union states must retire over 900 nuclear delivery systems and destroy their launchers (e.g., silos, submarines, and heavy bombers) to comply with START I limits--Russia must retire the greatest number of systems--i.e., nearly 600.

Russia--The GAO reported that Cooperative Threat Reduction program officials intend to provide Russia with cranes, welding implements, hydraulic tools, bulldozers, liquid fuel containers, incinerators, plasma cutters, and other items. The GAO concluded, however, that recent Cooperative Threat

See p. 8.

Reduction assertions that Russia cannot meet its START I obligations without such aid appear to be overstated. The GAO asserted that Russia had been dismantling nuclear weapons systems in compliance with arms control treaties for decades without U.S. assistance.

Ukraine--The GAO observed that the Ukraine had fewer delivery systems to dismantle but lacked Russia's capabilities and infrastructure. The GAO concluded, therefore, that U.S. aid appeared likely to facilitate Ukrainian dismantlement efforts. The GAO noted that program officials planned to obligate over 70 percent of the estimated cost of dismantling Ukrainian systems. The GAO further noted that the program will help provide equipment (including fuel, cranes, cutters, computers, and incinerators) and a SS-19 liquid propellant neutralization facility, as well as assist in deactivating SS-24 missiles.

Kazakhstan and Belarus--The GAO noted that Cooperative Threat Reduction program officials planned to provide Kazakhstan with needed technical assistance in destroying SS-18 missile silos once Russia removed the warheads and missiles. The GAO further noted that the U.S. and Kazakhstan had yet to define program requirements or obligate significant funds for dismantling delivery vehicles. The GAO added that program officials also planned to help clean up former strategic rocket forces facilities in Belarus. (pp. 13-15/GAO Draft Report)

**DoD Response:** Partially concur. The GAO correctly reports that U.S. assistance to Ukraine and Kazakhstan will facilitate the dismantlement efforts of those states. In Belarus, the U.S. will be providing material, equipment and training to teach Belarusian officials how to clean-up former strategic rocket forces (SRF) bases. Training on surveying former bases, analyzing the extent of contamination and managing a site restoration effort will occur at 1-2 former SRF bases but the actual clean-up work will be done by Belarusians, not by the U.S. The DoD assistance will give the Belarusian Government the capability to clean-up former military bases, so that they can be used for civilian purposes.

The GAO report alleges that DoD officials overstated the importance of strategic offensive arms (SOA) dismantlement assistance to Russia. There is no doubt that if the Soviet Union had remained intact, Russia could have met its START I (Strategic Arms Reduction Treaty) obligations without any

Now on p. 10.

See p. 10.

See comment 1.

assistance. However, the breakup of the former Soviet Union has resulted in severe dislocations. Equipment, material, and personnel have been left behind in the newly independent states. At lengthy technical experts meetings, the DoD required the Russian Committee for Defense Industries, the executive agent for the strategic dismantlement assistance agreement, to justify each piece of equipment requested. The DoD insisted that the Strategic Offensive Arms (SOA) dismantlement assistance be used to accelerate START I eliminations. The Russians showed U.S. experts (and the DoD has shared that information with the GAO) how the U.S. assistance would be used to shift the elimination schedule so that more of the SOA will be destroyed in the next two to three years than previously planned. The assistance that we agreed to provide is not sophisticated or unique. However, the Russians have informed us that it will help eliminate potential bottlenecks, especially at shipyards where ballistic missile submarines will be dismantled, and improve the efficiency of the dismantlement workers.

**FINDING E: Impact of Cooperative Threat Reduction on Chemical Weapons.** The GAO concluded that Russia does not appear to be able to comply with the time frames of the international Chemical Weapons Convention by safely destroying its declared 40,000 metric-ton chemical weapons stockpile. The GAO noted that U.S. officials concluded that Russia (1) was likely to place a low priority on paying the high cost of doing so and (2) lacked needed technical capabilities for safely destroying its chemical weapons.

The GAO reported that program officials planned to provide Russia a technical support office and chemical weapons analytical laboratory, technical services, and detailed operations plan for destroying the stockpile. The GAO noted that, according to program officials, the program might also help fund construction of a chemical weapons destruction facility from its FY 1995 budget. The GAO further noted that, according to a DoD official, the U.S. might spend \$300 million to help build a pilot destruction facility. (pp. 15-16/GAO Draft Report)

Now on pp. 10-11.

**DoD Response:** Partially concur. As the GAO correctly noted in its report, Russia lacks the necessary technical capabilities for safely destroying its chemical weapons. Early indications are that the Russian Duma is unlikely to ratify the Chemical Weapons Convention, unless the Yeltsin Government presents a credible explanation of how it intends to meet and finance the

See p. 10.

Convention's destruction requirements. The DoD is currently providing up to \$55 million in Nunn-Lugar assistance to help Russia prepare a comprehensive chemical weapons destruction implementation plan and to equip a central analytical chemical weapons destruction laboratory. The Russians would likely not have begun to engage in a serious chemical weapons destruction planning effort without U.S. assistance. The DoD is examining several options for future assistance to Russia for chemical weapons destruction. One option is to construct a destruction facility for nerve agent. The USG is committed to assisting Russia to destroy its chemical stockpile. What form that assistance will take and how much will be allocated to that effort are decisions which will be made after consulting with other agencies, the Congress, U.S. allies, and with the Russian Government.

**Finding F: Impact of Cooperative Threat Reduction on**

**Nonproliferation.** The GAO reported that Cooperative Threat Reduction officials planned (1) to help employ former Soviet Union weapons experts, (2) to improve controls and accountability over nonmilitary nuclear material, and (3) to strengthen national export control systems. The GAO added that the Cooperative Threat Reduction program had not assessed the total requirements for addressing the proliferation threat of the former Soviet Union—and U.S. officials had noted those Cooperative Threat Reduction projects would only lay the foundation for future efforts by the former Soviet Union states themselves. The GAO noted that, in order to find peaceful work in the former Soviet Union, Cooperative Threat Reduction officials planned to:

help establish multilaterally funded science and technology centers in Moscow and Kiev;

help develop or improve national controls and accountability over nonmilitary nuclear materials in Russia, Ukraine, and Kazakhstan; and

assess what would be needed to develop Western-style national export control systems in Ukraine and Kazakhstan and begin developing such a system in Belarus.

The GAO reported that U.S. officials had cited nonproliferation objectives in justifying U.S. support for the proposed Russian nuclear material storage facility. The GAO asserted that exactly how nonproliferation objectives

would be enhanced was unclear--unless additional agreements were reached. The GAO noted, however, that the Russians are not obligated to store all the materials from disassembled nuclear weapons in the U.S.- supported storage facility. The GAO explained that the facility (1) would enable Russia to prevent unauthorized access to weapons materials, and (2) could help support U.S. efforts to encourage nations to place such materials under international safeguards. The GAO noted that, to help ensure the facility accomplishes its nonproliferation objectives, the U.S. attempted to negotiate specific transparency measures that would help ensure that stored materials are derived from dismantled weapons, safe from unauthorized use, and not used in new weapons. The GAO observed that, although Russia had agreed to allow the U.S. to inspect the facility to ensure proper use of Cooperative Threat Reduction aid, Russian officials insisted that U.S. proposed transparency measures be part of a reciprocal and comprehensive arrangement with the U.S. The GAO pointed out that U.S. officials disagreed over the extent to which the U.S. should demand intrusive inspection of the facility. (pp. 16-19/GAO Draft Report)

Now on pp. 11-12.

**DoD Response:** Partially concur. The GAO correctly reported that the DoD is providing assistance to recipient states to help establish material control, accountability and physical protection systems for fissile material and export control systems to help prevent the proliferation of weapons of mass destruction (WMD) or their components. The GAO also noted the DoD plans to establish a Science and Technology Center in the Ukraine to provide peaceful research projects for former weapons scientists. The International Science and Technology Center in Moscow began operations in March 1994 and has approved its first projects. The DoD does not concur with the implicit criticism that it has not assessed the total requirements for addressing the proliferation threat of the former Soviet Union.

See comment 2.

In the former Soviet Union, there was no national accounting system for fissile material. The break-up of the former Soviet Union has resulted in great quantities of fissile material being scattered among facilities and institutes in the newly independent states. With the economic deterioration in each of those states, the danger of proliferant countries gaining access to that material has increased. The total requirement to secure the material, account for it, and prevent the proliferation of either the material or sensitive technologies is a huge task. The ultimate success or failure of that effort will depend on the governments of those states, who will need to devote the

resources to build upon our cooperation. Indeed, the entire Nunn-Lugar program is premised on the FSU governments making substantial contributions to those efforts. The USG does not envision funding the entire task of any project. The DoD can only lay the foundation for future efforts and facilitate such efforts of those states.

The general approach is best reflected in our materials control and accounting (MC&A) assistance program. The DoD is helping the recipient states construct an MC&A system at a small number (2 to 3) of facilities that contain fissile material for civilian use. The DoD is also considering options for expanding MC&A assistance at facilities in Russia where there is fissile material for military use. Those model facilities could then be used as the basis for developing a national MC&A system. The small amount of assistance the DoD has available precludes the Department from constructing MC&A systems at every facility in the states that contain fissile material. Each of the governments will need to devote the necessary resources for developing national MC&A systems building upon the model facilities for which the DoD provided cooperative assistance.

Similarly, our export control assistance program involves training specialists, helping the governments draft laws and regulations, and assisting in developing border posts. It is up to each recipient state to go further and fully institute an export control system that includes lists of restricted items, licensing procedures, trained customs officials, etc. The DoD cannot fund development of entire systems. However, the Department can provide equipment and model border posts as examples of Western-style systems. Those states will need to devote their own resources to build national export control systems.

The DoD is also concerned about the possible "brain drain" of former weapons scientists to proliferant countries. Along with Japan and the European Union, the U.S. has established an International Science and Technology Center (ISTC) in Moscow which gives the scientists opportunities to conduct civilian research. The first projects were approved at the first board meeting in March, and the DoD has used \$7 million of the \$25 million in Nunn-Lugar funds made available for ISTC projects. The DoD has also signed an agreement with Ukraine to establish a Science and Technology Center (STCU) in Kiev along with Canada and Sweden. That agreement will soon enter into force.

Once again, the DoD cannot provide employment for every former weapons scientist in those countries nor guarantee that all scientists will not continue to do weapons work either for their country or for a proliferant state. By offering those scientists a peaceful commercial alternative and an opportunity to work with Western scientists and institutions, hopefully the DoD can encourage them to pursue peaceful, civilian projects. The DoD has taken advantage of the opportunity that the Nunn-Lugar funds provide to "get a seat at the table" and attempt to head off a potential problem. Together with our allies, the U.S. is trying to plant a seed and show the scientists that there are profitable and intellectually challenging alternatives to weapons research. So far the program seems to be meeting the objectives, as the ISTC has been overwhelmed with large numbers of grant proposals. As with all DoD CTR programs, audit and examination provisions will be exercised to ensure CTR funds are used for their intended purposes and we will review the ISTC project after two years to determine whether it should be continued.

**FINDING G: Funding Nonpriority Objectives.** The GAO reported that the Cooperative Threat Reduction program had developed several projects aimed at addressing nonpriority objectives--primarily defense conversion. The GAO noted that Cooperative Threat Reduction officials planned (1) to help former Soviet Union enterprises producing weapons of mass destruction spin off privatized civilian firms, and (2) by June 1994, to award contracts to U.S. firms to help create civilian companies from four Russian defense enterprises. The GAO also noted that the DoD had established a nonprofit corporation to administer a Demilitarization Enterprise Fund to invest Cooperative Threat Reduction assistance in achieving program goals.

The GAO concluded that prospects for success in defense conversion were unclear at best. The GAO explained that parent companies would still produce defense equipment, and the extent to which the newly privatized firms would be clearly separated from their parents remained unknown--raising the possibility that U.S. aid could benefit the Russian parent defense companies. The GAO noted DoD officials had acknowledged that the untested Cooperative Threat Reduction approach might not succeed in producing profitable projects or lead to privatized firms, in which case the remaining projects could be terminated.

The GAO observed that, although the Cooperative Threat Reduction program has yet to assess the total requirements of converting Russian industries or the total cost for former Soviet Union defense industry conversion, Cooperative Threat Reduction officials indicated the defense conversion projects could receive another \$60 million in FY 1995 funds and could eventually cost as much as \$250 million. (pp. 19-21/ GAO Draft Report)

**DoD Response:** Partially concur. The GAO correctly noted the DoD plans for providing assistance to the newly independent states for defense industry conversion. However, the DoD disagrees with the categorization that the program is a "nonpriority objective" and finds disturbing the one-sided nature of the GAO analysis of the program. The GAO has stated some of the potential problems that could arise with providing defense conversion assistance -- problems which the DoD has acknowledged and is taking into account when designing specific assistance projects. Unfortunately, the GAO has not reported on the benefits of providing defense conversion assistance and the rationale behind the assistance.

The DoD disagrees with the GAO assertion that defense conversion assistance is a "nonpriority objective" of the CTR program. One of the purposes of the program, written into law, is to assist the newly independent states with their non-proliferation efforts and with the conversion of their defense industries and capabilities, particularly those that were involved in the production of weapons of mass destruction, to civilian activities. Defense conversion projects are a critical tool of the CTR program and part of the strategy to reduce the threat from weapons of mass destruction in the former Soviet Union. The 12 percent of CTR funding (\$115 million in FY 1993 and 1994, out of the total \$988 million funds authorized) allocated to defense conversion is an essential element of the program for several reasons.

First, U.S. security is enhanced not only by dismantling weapons of mass destruction currently deployed on the territory of the FSU, but also by facilitating the shrinkage and reorientation to peaceful purposes of the massive weapons of mass destruction industrial complex. The newly independent states still have the ability to produce weapons of mass destruction (WMD) and their components -- ballistic missiles, chemical weapons (in the case of Russia), and the rest of the formidable arsenal of the FSU. Without defense conversion, the governments of those states and plant

See comment 3.

managers might become convinced that they have strong incentives to keep the production lines open, which increases the danger of unconstrained arms exports and proliferation as well as the danger that the states could try to reconstruct the FSU's excessive weapons of mass destruction arsenal under possible future hostile governments. Through CTR defense conversion; the incentives for the newly independent states to produce weapons of mass destruction, or to transfer WMD-related technology to other countries are decreased, and the threat to the U.S. is similarly reduced.

The funds devoted to defense conversion are a small fraction of the DoD CTR funds and a very small fraction of what is needed to convert the WMD-related industries of the FSU. The strategy is to use CTR funds as "seed capital" with the aim of attracting much larger amounts of private capital. The targets of CTR assistance include joint business initiatives between U.S. companies and privatized spinoffs of WMD-related defense enterprises in Russia, Belarus, Ukraine, and Kazakhstan. Most CTR funds will be competitively awarded to the U.S. partner in such business initiatives. The results will be beneficial to U.S. companies starting these projects, to the skilled personnel in the FSU, to the overall economy of the participating nations, and to the security of the U.S.

Second, without defense conversion, the newly independent states are unable to absorb the millions of defense and military workers that are displaced when bases and defense plants are closed down. Concern about the social, economic and political costs related to those personnel discourages them from dismantling the military facilities and bases that threaten us. By offering prospects for alternative employment for defense workers and decommissioned military officers, conversion is integral to our goals of denuclearization, dismantlement, and non-proliferation.

As the GAO noted in the report, the DoD has established a Defense Enterprise Fund, which is a private, non-profit organization, governed by an interim Board of Directors and managed by a staff with demonstrated expertise in the private sector, particularly as it relates to the defense sector and opportunities for defense conversion. The Fund will initially be capitalized with Nunn-Lugar funds. It will identify defense conversion projects and encourage joint ventures and private capital investment that will lead to long-term business relationships.

The fund will determine, using DoD guidelines in the charter document, where to invest the capital provided to it, and will be authorized not only to provide goods and services, but also to make loans or grants, provide collateral for Export-Import Bank guarantees, take equity positions, and provide venture capital for joint ventures along with private industry. That will allow the Fund to leverage USG funds to promote additional private investment. The Fund will invest exclusively in projects to convert the defense sector of the newly independent states, and will focus, in particular, on those industries that produce weapons of mass destruction including strategic offensive arms and chemical weapons, and the components for such weapons.

While the U.S. government role in FSU defense conversion is ultimately limited, it is a critical catalyst for the private sector involvement that must be the engine of this conversion. The DoD acknowledges the risks that some of the joint ventures may fail, but expects the benefits to far outweigh the risks. Audit and examination provisions will be exercised to ensure that CTR funds are used for their intended purposes.

\*\*\*\*\*

#### RECOMMENDATIONS

**Recommendation 1.** The GAO recommended that the Secretary of Defense institute a proactive, long-term Cooperative Threat Reduction planning process to help the DoD properly allocate the billions of dollars it hopes to spend over the next several years among many competing -- and shifting -- demands. (p. 21/GAO Draft Report)

**DoD Response:** Concur. The DoD will establish two long-term planning offices -- one in Policy and one in Acquisition -- to assist in allocating future Nunn-Lugar assistance. The responsibilities of those offices are outlined in the detailed response to Finding B.

**Recommendation 2:** The GAO recommended that the Secretary of Defense institute a proactive, long-term Cooperative Threat Reduction planning process that incorporates estimates of (a) total requirements for achieving Cooperative Threat Reduction objectives, (b) prioritization of competing objectives, (c) evaluations of completed projects, and (d) assessments of what

See p. 14.

See p. 14.

U.S. aid could reasonably achieve in overcoming obstacles confronting Cooperative Threat Reduction objectives. (p. 21/GAO Draft Report)

**DoD Response:** Concur. As stated in the response to Finding B, the DoD will establish a policy planning office in the office of the Assistant Secretary of Defense (ISP). Working in conjunction with other DoD offices, the new office will assess the long-term needs of the recipient states, estimate the total requirements for each CTR program, and prioritize competing objectives. That office will also evaluate completed projects, and ensure that future budget requests are driven by a long-range assessments of needs. In addition, the office will be responsible for monitoring other complementary U.S. assistance programs to the FSU, including those run by the Agency for International Development (AID) and the Department of State, as well as those run by non-governmental organizations, to ensure that there is no duplication of effort and to better focus and coordinate the assistance program.

**Recommendation 3:** The GAO recommended that the Secretary of Defense institute a proactive, long-term Cooperative Threat Reduction planning process under which the DoD should periodically revise and update the plan and use it in producing annual budget submissions -- submissions that are keyed to achieving priority Cooperative Threat Reduction goals. (p. 21/GAO Draft Report)

See p. 14.

**DoD Response:** Concur. The newly-established policy planning office will be assigned the responsibility of developing and periodically revising a plan that will guide future budget submissions.

\* \* \* \* \*

#### MATTERS FOR CONGRESSIONAL CONSIDERATION

**SUGGESTION 1:** The GAO suggested that the Congress delay approval of FY 1995 funds for those Cooperative Threat Reduction projects designed to ensure timely Russian START I compliance until program officials can document how and to what extent the additional aid will accelerate dismantlement of strategic delivery vehicles--given the Russian START progress. (p. 22/GAO Draft Report)

See comment 4.

**DoD Response:** Non concur. As stated in the response to Finding D, DoD strategic offensive arms dismantlement assistance to Russia is necessary to assist the Russian Government accelerate the START I eliminations. The DoD provided the GAO with documentation that the Russians provided that showed how CTR assistance will facilitate and accelerate the eliminations. In the future, the DoD plans to provide additional strategic offensive arms dismantlement assistance to Russia. That assistance will help Russia with the elimination of solid propellant ballistic missiles and will help accelerate reductions required by the START II Treaty. Assisting with the elimination of strategic offensive arms that were previously targeted at the U.S. enhances U.S. national security. The DoD cannot offer assistance and sign an amendment to the existing strategic offensive arms dismantlement assistance agreement with Russia if the Congress has not authorized and appropriated the funds. The strategic offensive arms dismantlement assistance program is the cornerstone of the CTR program and should continue to be funded.

See p. 14.

**SUGGESTION 2:** The GAO suggested that the Congress require the Executive Branch to provide a detailed explanation of how the nuclear material storage facility would (a) serve U.S. nonproliferation interests and (b) directly affect Russian warhead dismantlement. (p. 22/GAO Draft Report)

See comment 5.

**DoD Response:** Non concur. The DoD does not believe that an additional reporting requirement focusing on the fissile material storage facility is necessary. The DoD has detailed the rationale behind the fissile material storage facility projects in quarterly reports to the Congress, in discussions with the GAO investigators, in Congressional testimony, and in the response to Finding C.

See pp. 14-15.

**SUGGESTION 3:** The GAO suggested that the Congress withhold large-scale funding for future Russian defense conversion projects until the program has assessed the initial results of currently funded projects -- given the uncertainties concerning defense conversion in Russia. (p. 22/GAO Draft Report)

See comment 3.

**DoD Response:** Non concur. As stated in the response to Finding G, defense conversion projects are a critical tool of the CTR program and part of an integrated approach to reduce the threat from weapons of mass destruction in the former Soviet Union. The DoD is just beginning CTR defense

conversion assistance, and it is premature to make judgments about its effectiveness, let alone cut funding. The DoD will continually assess the progress of the joint business initiatives and effectiveness of our assistance, and use the rights to conduct audits and examinations of the assistance provided to deter and detect any improper use of assistance. If DoD determines that the assistance is not being used as intended or that there is a problem, the DoD will not hesitate to stop the assistance until the problem is resolved.

In addition, the Defense Enterprise Fund has recently been established and capitalized. The U.S. would lose a major opportunity to assist Russian and the other recipient states in their historic transition from communism to free market economies if the DoD fails to capitalize the Enterprise Fund and allow it to begin making grants. Again, the DoD will regularly assess the effectiveness of the grants and exercise audit and examination rights to ascertain that the project is achieving its goals.

The following are GAO's comments on DOD's letter dated August 25, 1994.

## GAO Comments

1. DOD did provide us with documents showing the Russian dismantlement schedule with CTR assistance but could not provide any baseline data. We therefore could not determine to what extent CTR assistance would accelerate Russian dismantlement efforts. We do not disagree that CTR assistance could help the Russians increase the flexibility and efficiency of their dismantlement efforts.
2. While we do not disagree that CTR assistance being provided for nonproliferation efforts could assist the former Soviet republics, according to the information obtained during our review, DOD has not assessed the requirements needed to address the proliferation threats. This lack of requirements based spending underscores our recommendation that the program needs to develop a long-term planning process to ensure that funds are being properly allocated and that obstacles confronting CTR objectives can be effectively overcome.
3. We note that Congress has never designated defense conversion as a CTR priority. Instead, it has acted at times to limit some funding spent on defense conversion such as spending caps on the Defense Enterprise Fund. Many of the enterprises selected for conversion will continue to produce weapons. Profits and technology from the newly privatized firms could be returned to the parent defense enterprises. Furthermore, many Russian officials remain interested in preserving a sizable defense industry to earn hard currency by exporting arms. Based on these factors, the impact of defense conversion on nonproliferation efforts in the Former Soviet Union (FSU) appears to be remote. DOD's plans to request additional funding for defense conversion efforts in the FSU without first evaluating their outcome also indicates the need for a long-term CTR planning process.
4. Recently, CTR officials in meetings with us, conceded that CTR assistance was not essential for Russia to meet its Strategic Arms Reduction Treaty I (START) obligations. Rather, DOD has stated CTR assistance will help accelerate Russian dismantlement. We do not disagree that CTR assistance could help the Russians improve the efficiency of their dismantlement efforts. As a result, we have deleted this matter for consideration from our report.

5. The uncertainties of the storage facility have not been fully and clearly conveyed to Congress in past executive branch reports and statements of testimony. Given the facility's high potential cost—estimated at about \$315 million—we continue to believe that Congress may wish to consider requiring the executive branch to justify the storage facility by discussing all of the factors affecting its potential benefits.

# Comments From the Department of State

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



United States Department of State

Washington, D.C. 20520

JUN 21 1994

Dear Mr. Conahan:

We are pleased, on behalf of the Acting Chief Financial Officer, to provide the Department of State comments on your unclassified version of the draft report, "WEAPONS OF MASS DESTRUCTION: U.S. Efforts to Reduce the Threat from the Former Soviet Union," GAO/NSIAD-94-223, GAO Job Code 711087. Each comment references the associated report paragraph.

If you have any questions concerning this response, please call Mr. Phillip Dolliff, State - PM/SPN, at 647-7426.

Sincerely,

A handwritten signature in cursive script, reading "Carolyn S. Lowengart".

Carolyn S. Lowengart  
Director  
Management Policy

Enclosures:  
As stated.

cc:  
GAO - Ms. Hoffman  
State - Mr. Dolliff

Mr. Frank C. Conahan,  
Assistant Comptroller General,  
National Security and International Affairs,  
U.S. General Accounting Office.

Appendix IV  
Comments From the Department of State

GAO Draft Letter Report: "Weapons of Mass  
Destruction: U.S. efforts to reduce the threat  
from the former Soviet Union."

Page 3, footnote 3

Comment: This footnote states that GAO did not assess executive branch assertions that the "promise of future CTR aid has indirectly helped to persuade FSU states to begin or continue dismantling weapons".

See comment 1.

We view the fact that the report does not address this issue as a major shortcoming. One of the program's major, direct effects has been to increase the willingness of recipient states to become non-nuclear. This is particularly true of Ukraine and, to a lesser extent, Kazakhstan. In the case of Ukraine, for example, the U.S. pledge of additional dismantlement assistance to Ukraine was a crucial element of the trilateral accord and had a very direct effect on their willingness to accept the other terms of the agreement.

The Ukrainian example illustrates another important feature of U.S. dismantlement assistance -- the U.S. provision of assistance gives the U.S. a seat at the table in discussions of nuclear issues in the former Soviet Union and access to the highest level policymakers in these states. This access and our assistance allowed us to focus their attention on dismantlement and denuclearization at a time when their overwhelming economic concerns could have easily caused them to only focus on domestic concerns.

See comment 2.

The report tends to equate expenditure of funds with success -- this greatly underestimates the impact of the Safe Secure Dismantlement (SSD) program. While the program has had many important achievements, its ability to facilitate the denuclearization of these states must stand as among its largest contributions to national security and the failure of the report to note this except in a footnote is a major omission.

See pp. 8-9.

Page 4, para 1:

Comment: The para states that Russia will be able to meet its START obligations without CTR assistance. This statement is misleading because it fails to note that Russian ability to meet these requirements is in part due to the long "head-start" it has had to begin reductions while the other START parties completed ratification and other related actions. In addition, the purpose of SSD assistance goes beyond just allowing the Russians to meet START I reductions to facilitating the acceleration of such reductions and allowing them to destroy items that are not treaty accountable such as the missiles themselves -- items whose elimination will diminish the threat to the U.S.

See comment 3.

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Comments From the Department of State

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See comment 4.

In addition, OSD, in its discussions with GAO regarding this report, noted that U.S. experts discussed the justification and purpose of each type of equipment provided for Strategic Offensive Arms Elimination (SOAE) in depth with the Russian experts and OSD has shared this information with the GAO. We share OSD's confidence that the SOAE assistance provided will address critical chokepoints in the Russian dismantlement effort, particularly in the elimination of SLBM launchers.

Now on p. 3.

Page 4, para 3

See comment 5.

Comment: This paragraph's mention only of DoD's views is misleading. While DoD may place a higher priority on defense conversion than nonproliferation, other agencies are involved in the decision-making process on the allocation of Nunn-Lugar funds and they do not necessarily share all of DoD's perspective. Nonproliferation has achieved an increased share of the Nunn-Lugar funds for FY94 through the efforts of these other agencies and there is reason to believe this emphasis will continue in future years.

Now on p. 7.

Page 9, para 2

See comment 6.

Comment: An Audit and Examine system is a financial management and control tool not an "important planning tool" as described in the text. Planning relates to future requirements of recipient states whereas audit and examine procedures provide feedback on assistance already provided. While such controls are clearly useful and are in the process of being established, this paragraph is out of place in this section.

See p. 7.

Page 9, para 3

Comment: This paragraph, in its current one sentence form, is too incomplete to warrant inclusion. Without additional description of what the limitations are, the sentence raises more questions than it answers.

See comment 7.

Page 11, Para 3, sentence 2.

Comment: While the State department is concerned with the risk of unauthorized diversion of a weapon, the Russian warhead accounting and physical protection systems appears to be quite robust. We strongly recommend that this section be changed to include the view that the Russian system of warhead controls is robust.

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Comments From the Department of State

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See p. 8.

Page 12, para 2

Comment: This paragraph's statement that the kits will modify only a small fraction of Russia's warhead railcar fleet is very misleading. The majority of Russia's railcar fleet is for wartime movement of warheads and its size is far in excess of their requirements to support peacetime transport requirements for dismantlement. The Russian request for 115 kits is based on their assessment of their requirement for rail transport to support dismantlement. We strongly recommend that this paragraph be heavily modified to place these railcar numbers in context.

Now on pp. 9-10.

Page 13, para 3

Comment: See comment on page 4, para 1. Particularly important in this context is that CTR assistance will eliminate items that are not treaty accountable.

See comment 3.

See p. 11.

Page 17, para 4, last sentence

Comment: This sentence is somewhat misleading. The Russians have had a facility-based system of material control and accounting for all facilities on their territory.

The sentence as its currently drafted leaves the impression that the Russians lack MC&A systems at some of their facilities. Therefore, we recommend that GAO modify the sentence to be more specific about the shortcomings in the Russian system.

See pp. 11-12.

Page 18, para 2, first sentence

Comment: The sentence is incorrect in characterizing U.S. export control efforts in Ukraine and Kazakhstan as just planning to assess their needs to develop western style export control systems. We have already begun to provide assistance to these countries to upgrade their export control systems towards western standards and the majority of our export control assistance for these states will be to that end, not assessments.

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Comments From the Department of State

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See pp. 11-12.

Page 18, para 3

Comment: This paragraph is contradictory. It states in sentence two that it is "unclear" how "nonproliferation objectives would be enhanced" by the fissile material storage facility "unless additional agreements are reached". But only two sentences later it specifically notes how this would be accomplished, "the facility would enable Russia to prevent unauthorized access to weapons materials". No additional agreements are required for this benefit since the Russians already intend to store weapons material at this facility for the precise purpose of limiting unauthorized access. We strongly recommend that sentence 2 be deleted or heavily modified to reconcile it with sentence 4.

Page 22, para 1

See comment 8.

Comment: The suggestion that Congress withhold SOAE funds for Russia until DoD can document how they will accelerate dismantlement of SNDV is misguided and poorly timed. First, as noted in the comments above the strategic offensive arms assistance to Russia is designed to do more than just facilitate the elimination of treaty accountable items but is also designed to facilitate the elimination of other items such as the missiles themselves, which while not treaty accountable also pose a threat to the United States.

Second, holding DoD to some standard of proof on the acceleration of the Russian effort caused by U.S. assistance misunderstands the nature of the dismantlement process. While any casual observer would have confidence that U.S. provision of assistance in the form of much needed equipment would accelerate the Russian effort, quantifying the acceleration or documenting in detail the effect of U.S. assistance on a very complicated process would be very difficult. In addition, such an effort would distract OSD from the task of program implementation and could divert substantial levels of effort to a task of questionable analytical utility.

Finally, the timing of such a requirement is too late. The majority of SOAE funds related to the elimination of SNDV and associated equipment that relates to START I has already been negotiated with the Russians and is well along in the procurement cycle. Additional increments of assistance in this category will be small amounts of equipment intended to fill a few remaining Russian requirements. (The majority of additional SOAE assistance to Russia will be for systems covered by START II, primarily solid fueled missiles and their associated equipment.)

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See comment 9.

The second suggestion that the administration be required to provide a "detailed explanation of how the nuclear material storage facility will (1) serve U.S. nonproliferation interests and (2) directly affect Russian warhead dismantlement" will only force the administration to restate its existing arguments. As noted in the GAO report, the facility will limit unauthorized access to highly sensitive weapons grade nuclear material in component form. And the facility will contribute directly to the Russian dismantlement effort by meeting what the Russians have repeatedly stated is their number one dismantlement requirement: a facility appropriate for long term safe and secure storage of the dismantlement components of the weapons. While GAO may express skepticism about these two arguments, as it did in the report, no point would be served by Congress formally requiring the administration to restate its arguments.

The following are GAO's comments on the Department of State's letter dated June 21, 1994.

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## GAO Comments

1. We do not take issue with the State Department's assertions that one of the CTR program's major direct effects has been to increase the willingness of recipient states to become non-nuclear and that the U.S. provision of assistance allows for U.S. participation in discussions of nuclear issues in the FSU and access to high-level policymakers. However, the verification and validation of such assertions were beyond the scope of our review.
2. The report does not equate program success with the expenditure of funds. Instead, the report cites several reasons why funds could not have been expended sooner.
3. We took issue with DOD assertions that CTR assistance was needed to ensure that Russia can meet its START I obligations. Such assertions were conveyed to Members of Congress as justification for providing dismantlement assistance to Russia. Recently, however, DOD officials have conceded that Russia does not need dismantlement assistance to meet its START I obligations.
4. DOD provided us with documents showing Russia's dismantlement schedule with CTR assistance but could not provide any baseline data. We, therefore, could not determine to what extent CTR assistance would accelerate Russian dismantlement rates. We do not disagree that CTR assistance could help the Russians improve the efficiency of their dismantlement efforts.
5. The State Department is correct in noting the role of other agencies involved in the CTR program; however, DOD plays a key role in the decision-making process for allocating CTR monies.
6. The State Department's definition of an audit and examination process is narrowly focused. An audit and examination process is much more than a financial accountability system. Without knowledge of how well assistance is being used, DOD cannot plan what future requirements should be fulfilled in the FSU.
7. As noted in our report, U.S. officials are concerned that a Russian nuclear warhead could be lost or stolen.

8. We have removed this matter for consideration from our report because DOD officials have recently conceded that Russia can meet its START I obligations without CTR dismantlement assistance. DOD has stated that CTR assistance will help accelerate Russian dismantlement. We do not disagree that CTR assistance could help the Russians improve the efficiency of their dismantlement efforts.

9. We disagree with the Department of State's suggestion that the facility will necessarily contribute directly to the Russian dismantlement effort. The uncertainties of the storage facility have not been fully and clearly conveyed to Congress in past executive branch reports and statements of testimony. Given the facility's high potential cost—estimated at \$315 million—we continue to believe that Congress may wish to consider requiring the executive branch to provide it with a detailed justification of the facility project that discusses all of the factors affecting its potential benefits.

# Comments From the Arms Control and Disarmament Agency

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY  
Washington, D.C. 20451

June 17, 1994

Mr. Frank C. Conahan  
Assistant Comptroller General  
National Security and International  
Affairs Division  
United States General Accounting Office

Dear Mr. Conahan:

This letter is in response to a telephone request made by Beth Hoffman-Leon of the GAO staff to Karin L. Look, SEA/ST Division Chief, on June 10, to provide an unclassified version of the letter we sent you on May 27 (in response to your classified package of May 9). We have reviewed our initial letter and made the appropriate changes to make our comments unclassified. Thus, the following comments and recommendations repeat, insubstance, our May 27 letter, but in an unclassified fashion.

Comments and Recommendations

See p. 2.

Page 2, first paragraph under heading "Results in Brief:" Since this draft was circulated, another \$7.6 million for the Defense Conversion Enterprise Fund has been notified to Congress; raising the "intend to obligate" figure to \$968.6 million. This should be updated, or some timeframe for the report should be specified.

See comment 1.

Page 3, Footnote 3: ACDA would estimate Ukraine's willingness to sign the Trilateral Statement -- especially their promises to deactivate SS-19s and SS-24s -- on January 14 to be a direct result of dismantlement assistance both provided and promised.

See p. 2.

Page 4, first sentence on page (concluding sentence of paragraph beginning on page 3): This appears to contradict Footnote 3. Also, "Kazakh" (the term for the principal non-Russian ethnic group in Kazakhstan) should be changed to "Kazakhstani" (the preferred term for a citizen of Kazakhstan, regardless of ethnic origin).

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Comments From the Arms Control and  
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Now on pp. 2-3.

Page 4, first full paragraph, last sentence: The U.S. objective in rendering this assistance to Russia was to help them accelerate START Treaty reductions (and to carry out programs like warhead dismantlement, which is not a part of formal treaty obligations), not to enable it to meet these obligations. OSD/GC, as well as ACDA, has consistently made this point to OSD offices that administer SSD/CTR programs. Also, if you retain the treaty references, change the last phrase to read: "...obligations and eliminate thousands of strategic nuclear delivery vehicles and launchers over the next decade." (START does not require warhead elimination.)

See comment 2.

Now on p. 3.  
See comment 3.

Page 4, final paragraph: ACDA would note that there is a linkage between defense conversion and nonproliferation -- factories that are not producing armaments are part of the proliferation solution rather than the problem.

See p. 3.

Page 5, first paragraph under heading "Program Implementation and Spending Pace:" Change "\$961 million" to "\$968.6 million." In third sentence, insert "higher" between "directed towards" and "priority objectives."

See p. 3.

Page 5, footnote 5: For sake of accuracy, change the second sentence to read: "They periodically discuss such aid with the U.S. and other allies in NATO and G-7 fora."

See p. 5.

Page 6, paragraph under Figure 2: To more accurately characterize the reasons for delay, we would change the first sentence to read: "CTR officials cite several factors in explaining the pace of program implementation to date, including more time required in completing agreements with FSU states and complications in executing projects, often due to political sensitivities and even political disarray on the part of the recipient republics."

Now on p. 6.

See comment 4.

Page 8, the first sentence on the page is misleading. As structured, it sounds as though \$922 million was "lost" vice \$212 million. We would rephrase to say: "Consequently, of the \$1.2 billion authorized for the program, \$988 million was available to fund projects. By March of 1994, some \$278 million of this \$988 million (funds from Fiscal Years 1993 and 1994) remained available as of March 1994 for spending, with the remainder having been previously committed to CTR projects."

Now on p. 6.  
See comment 5.

Page 8, heading entitled "Lack of CTR Planning:" This is needlessly pejorative, especially given the report's opening paragraphs. ACDA would retitile this heading "Problems in CTR Planning and Execution."

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- See p. 6. Page 8, footnote 8: Insert "representatives from the" between "group includes" and "the Joint Chiefs..."
- Now on p. 6. Page 9, second paragraph, last sentence, change "CTR officials" in to "Program officials."
- See p. 7. Page 10, second paragraph, first sentence under heading "Nuclear Warheads," insert "Some" before "Russian officials," for the sake of accuracy (see our classified letter for clarifying comments).
- See p. 8. Page 11, first full paragraph: (2) is not clearly defined, in that the reader may be unsure what is meant by "may not be well suited for storing weapons components." If the lack of suitability is from the standpoints of safety, environment and security, we ought to say so (mismarked as classified in May 27 letter).
- See pp. 9-10.  
See comment 2. Page 13, third paragraph under "Strategic Delivery Vehicles:" Even more than our similar comment on page 4, the objective of U.S. SSD/CTR is not to pay Russia or the other FSU republics to meet their treaty obligations. Also, in the second sentence of the same paragraph, change "weapons systems" to "delivery systems" for clarity; this presumably refers to SALT I missile and launcher dismantling and not warhead dismantling (see our classified letter for clarifying comments).
- See p. 10. Page 15, second paragraph under heading "Chemical Weapons," change first sentence to read: "CTR officials have provided Russia with a technical support office and technical services, and are also in the process of providing both a chemical weapons analytical laboratory and a detailed operations plan for destroying the stockpile." (Accurate rendering of latest state-of-play)
- See p. 11. Page 17, second full paragraph, insert "there" between "stated that" and "are several hundred."
- See p. 11. Page 17, third full paragraph, change first sentence to read: "To help them find peaceful work in the FSU, U.S. CTR and allied officials have established a multilaterally funded science and technology center in Moscow and plan to establish a similar center in Kiev" (accuracy).
- See p. 11. Page 17, fourth full paragraph, change first sentence to read: "CTR officials plan...and accountability over nonmilitary and

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military nuclear materials in Russia, as well as nonmilitary nuclear materials in Kazakhstan and Ukraine." (Accurate rendering of latest state-of-play)

See pp. 11-12.

Page 18, first full paragraph, change second sentence to read: "They have also begun to develop such a system in Belarus" (accuracy).

See pp. 11-12.

Page 19, first full paragraph, last sentence, is incorrect. The U.S. does now have an agreed position on the storage facility transparency issue. Sentence should read: "Prior to the March meeting of the U.S. SSD Delegation with Russia, a detailed proposal, agreed upon by the interagency, was provided to the Russian side."

Now on p. 13.

Page 19, heading entitled "Nonpriority Objectives:" As all CTR programs such as defense conversion are listed in the legislation as "in the national security interest of the United States," we believe it is inaccurate to label this area as "Nonpriority," and would recommend using the word "Other" instead.

See comment 6.

Now on p. 13.

Page 19, first paragraph under "Nonpriority Objectives" heading, based on rationale provided above, first sentence should read: "The CTR program...projects aimed at addressing objectives which are indirectly related to nonproliferation--primarily defense conversion."

Now on p. 13.

Page 21, paragraph under "Recommendation" heading. SSD/CTR utilizing Nunn-Lugar funds is a U.S. Government effort which is administered by DOD. In that light, we would change the first sentence to read: "We recommend that the National Security Council institute a proactive, long-term CTR planning process to enable the U.S. Government to properly allocate the billions of dollars..." (see comments under "Security Review").

See p. 15.

See p. 15.

Page 23, second paragraph, second sentence, to ensure the entire interagency is kept abreast of this report, please change to read "...Energy, State and to the Chairman, Joint Chiefs of Staff, the Director of the Arms Control and Disarmament Agency and the Director of Central Intelligence."

Security Review

Now on pp. 13-15.

While there is no classified information per se on pages 21 and 22, we would note that historically, discussions and debate among the interagency and between the branches of government on national security-related policy approaches to other countries

See comment 7.

**Appendix V  
Comments From the Arms Control and  
Disarmament Agency**

-5-

have usually been classified "Confidential", at least until policy is decided and acted upon (see our comment reference page 21). Having said this, we leave that determination to you. The remainder of the document to us appears to be classified appropriately.

If you have any questions, please contact Karin L. Look, Bureau of Strategic and Eurasian Affairs, Strategic Transition Division (ACDA/SEA/ST) at (202) 647-8253.

Sincerely,

  
Cathleen E. Lawrence  
Director of Administration

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The following are GAO's comments on the Arms Control and Disarmament Agency's (ACDA) letter dated June 17, 1994.

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## GAO Comments

1. Although we do not take issue with ACDA's assertion that Ukraine's willingness to deactivate its missiles was a direct result of dismantlement assistance both provided and promised, verification and validation of such an assertion were beyond the scope of our review.
2. We took issue with DOD's assertions that CTR assistance was needed to ensure that Russia can meet its START I obligations. Such assertions were conveyed to Congress as justification for providing CTR dismantlement assistance to Russia. Recently, CTR officials have conceded that Russia does not need dismantlement assistance to meet its START I obligations.
3. Based on the uncertainties associated with defense conversion assistance in the FSU, the impact of defense conversion on nonproliferation efforts appears to be remote.
4. While Congress had authorized over \$1 billion for the CTR program, only \$278 million was available as of March 1994. We did, however, modify the report to clarify this point.
5. To date, no long-term plan exists for the CTR program.
6. The heading of "Nonpriority Objectives" describes those CTR efforts that were not congressionally designated as priorities.
7. The information discussed does not represent interagency discussions and deliberations. Rather, we generated the recommendation and matters for congressional consideration based on our findings. Based on our sources, the information, as stated, is unclassified.

# Major Contributors to This Report

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